EDITORIAL

# Pain Management: Trends and Challenges

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Pain remains as one of the most common reasons for visits to a doctor. The paper by Zalinawati *et al*[1] published in this issue of the Journal confirmed this in two primary care settings, showing that a complaint of pain was recorded in almost a third of patients, similar to the prevalence reported in European studies.

Although all doctors are familiar with pain as a complaint, the majority treat pain as a symptom rather than a disease. This, however, only applies to *acute* pain, which resolves when injured tissues heal. On the other hand, there are a substantial group of patients with *chronic* pain, defined as pain that persists for more than three months, or beyond the healing period. This is the group that continues to frustrate the health care provider, coming repeatedly with the same complaints of pain, with only temporary relief from "usual" treatments for pain, including drugs, injections, physiotherapy and even surgery.

Acute pain occurs in many situations including trauma, post-surgical pain and acute medical conditions. As doctors we are obliged - and have the means with modern drugs and techniques available today - to relieve acute pain in all patients, reducing not only suffering but also adverse physiological effects of unrelieved acute pain on the cardiovascular, respiratory and other systems. More importantly, however, unrelieved acute pain can lead to chronic pain states, as in cases of chronic persistent pain after surgery[2,3]. Pain is also a common symptom in patients with cancer, especially in the advanced stages, and today, we should be able to relieve more than 90% of cancer pain using simple means and following the WHO analgesic ladder[4].

The bigger challenge to us as health care providers is to manage chronic non-cancer pain effectively. We must first and foremost realize that chronic pain is different from acute pain, and therefore needs to be approached differently. While acute pain is a symptom, a warning signal of tissue damage, chronic pain should be seen as a disease in its own right – a disease of the nervous system which should be managed independently of the underlying disease[5].

The International Association for the Study of Pain (IASP) has defined pain as "An unpleasant sensory and emotional disturbance, associated with actual or potential tissue damage, or described in terms of such damage"[6]. The IASP goes on to elaborate that "Pain is always subjective" and that "many people report pain in the absence of tissue damage .... it should be accepted as pain"[6]. Unfortunately till today the majority of people, including doctors, do not understand that that there can be pain in the absence of ongoing tissue damage and that pain can continue even after tissues have healed.

The concept that pain is always associated with damage is based on the Cartesian model of pain[7] and has two main implications – firstly that, all pain can be relieved, provided we find the underlying cause, and therefore we should continue to search for a cause of the pain, and secondly, that if there is no cause found, that the pain must be "psychogenic". However, the Cartesian model is unable to explain many clinical and social observations, for example the absence of pain in the presence of tissue damage (e.g. in the battlefield), the persistence of pain beyond the healing period (chronic pain) and phantom pain.

The Gate Control Theory of pain by Melzack and Wall in 1965[8] was critical in shaping our current understanding of pain. One of the central concepts was that pain was not "hard wired" but that the nervous system exhibited "plasticity", and that the brain had an active and dynamic role in pain processing. Today, the

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phenomena of peripheral and central sensitization are well established and researched as the pathophysiological basis for neuropathic pain and other chronic pain states.

The biopsychosocial model of pain[9] provides a better understanding of chronic pain. According to this model, there are four nested components in human pain - nociception, pain, suffering and pain behaviours; the first three are internal events that one cannot measure directly in another person, but infers them by observation of pain behaviours. Pain behaviours, include - grimacing, taking pain medication, lying down, seeking medical care, all of which we have learnt to interpret as pain. It is important to realize, though, that there is no direct correlation between the magnitude of the nociceptive stimulus and the amount of suffering or pain behaviours exhibited by the patient, as these components have contributions from psychological, social and environmental factors, which interact to contribute to the maintenance of pain, low mood and disability in patients with persistent pain[10].

Having a better understanding of pain leads to different approaches to the management of pain, especially chronic pain. Treatment of patients with chronic pain using a "curative" approach based on the biomedical model of pain is limited. Multidisciplinary, multimodal approaches, utilizing a combination of medical, physical and psychological techniques, are necessary for the effective management of chronic pain. Systematic reviews and meta-analyses have provided evidence of the effectiveness of pain self-management based on cognitive-behavioural (CBT) principles[11, 12]. These interventions teach patients skills to improve their function and mood and decrease reliance on passive coping mechanisms such as resting, taking medication and undergoing repeated procedures[13].

What are the implications for us in Malaysia? Although the precise prevalence of chronic pain in Malaysia is unknown, studies in western countries have indicated that between 15-20% of adults report having some form of chronic pain[14, 15]. If similar prevalence levels were assumed here, there would be over 3 million Malaysians with chronic pain. Although reports show that pain interfered with activities in only about 50% of those with persistent pain[16], this is still a huge burden on the health care system, and a loss in productivity for the nation. Therefore, if chronic pain can be effectively managed, and patients with chronic pain improve their function and mood, and are able to return to work and play their role in society, the impact on the country as a whole would be tremendous.

The field of Pain Medicine is an emerging one in Malaysia and it may be that the practitioners of Pain Medicine have to lead the way in changing the approach to the management of chronic pain. However, because chronic pain is so pervasive, and because, as shown by Zalinawati *et al*[1] patients with pain commonly present to the primary care practitioner, it is the responsibility of all doctors and health care providers to learn about effective multimodal management of chronic pain. We need to incorporate medical, physical and psychological modalities, and involve all health care providers – doctors, nurses, psychologists, physiotherapists, occupational therapists, and most importantly, the patients themselves - in the management of chronic persistent pain.

The empowerment of chronic pain patients with knowledge and self-management skills and confidence that they can lead normal lives *despite* persisting pain – this is our challenge.

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